



CITY OF LODI COUNCIL COMMUNICATION

AGENDA TITLE: Approve Specifications and Authorize Advertisement for Bids for the Rejuvenation of 15,290 feet of Underground Electric Cable in English Oaks Phase One (\$145,000) (EUD)

MEETING DATE: April 7, 2010

PREPARED BY: Interim Electric Utility Director

RECOMMENDED ACTION: Approve specifications and authorize advertisement for bids for the rejuvenation of 15,290 feet of underground electric cable in English Oaks Phase One in the amount of \$145,000.

BACKGROUND INFORMATION: A number of distribution circuits with direct-buried underground cables have more than 30 years of service and are wearing out. There have been a number of failures in direct-buried cable due to insulation weakness, which have led to power outages.

To ensure continued reliable service, it is prudent to replace aged direct-buried cable. Direct-buried cable is more expensive and difficult to replace than cable in conduit. Because of shorter life and much more expensive replacement, we no longer bury cable directly, but rather in conduit. Replacing direct-buried cable requires digging trenches, laying down new conduits, and pulling in new cables.

Last year, the Electric Utility Department tried rejuvenating the insulation of direct-buried cables in the Royal Crest Subdivision and it proved to be a cost-effective option. Rejuvenation involves injecting old cable with a product called Ultrinium 732 at high pressure, which is expected to extend the life of the cable for 40 or more years. The estimated cost of replacement was approximately \$300,000 and the actual cost of cable rejuvenation was approximately \$90,000, saving more than 50 percent of project cost. English Oaks Subdivision is served by aged direct-buried cable. English Oaks Phase One is proposed for the second cable rejuvenation project.

FISCAL IMPACT: Estimated cost of rejuvenation is \$145,000. In the alternative, the estimated cost for replacement would be \$400,000. The estimated savings for rejuvenation over replacement is approximately \$255,000.

FUNDING: 160651.7713

A handwritten signature in black ink, appearing to read "Kenneth A. Weisel".

Kenneth A. Weisel
Interim Electric Utility Director

PREPARED BY: Demy Bucaneg, Jr., P.E., Assistant Electric Utility Director

KAW/DB/1st

APPROVED: A handwritten signature in black ink, appearing to read "Blair King".

Blair King, City Manager